Redesigning assessment for learning beyond higher education

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Abstract: *An important rationale for higher education is that it equips students for learning beyond the point of graduation. This paper considers the role that assessment plays in this. It suggests we need to take a new perspective on assessment: assessment to promote learning throughout life. It focuses on ideas that can be used to contribute to the construction of assessment practices and on wider implications for course design. It concludes by exploring barriers to acceptance of this perspective and how they might be addressed.*

Keywords: *assessment, lifelong learning, course design*

As is well understood, assessment fulfils more than one role. It grades students and eventually certificates them, but it also has a part to play in aiding their learning. While early books about assessment emphasised its summative function, seeing the student's role as that of test taker, the balance between these two functions has changed over recent decades, and the formative function now has greater prominence. Most early books about assessment featured examples of what Serafini (2000) called 'assessment as measurement'. This paradigm of assessment was followed, Serafini suggests, by two further paradigms: 'assessment as procedure' and 'assessment as enquiry'. The role of the student has also changed, and many teachers now aim to encourage their students to be active agents in their own learning. It would however be premature to suggest that the formative function of assessment is now central, even though many higher education institutions have policy statements that acknowledge it.

Rowntree (1987) also identified a further purpose of assessment. He argued that it should help prepare students for life. It is this purpose that interests and concerns us. Boud (2000) explored this purpose further, conceptualising it as 'sustainable assessment'. In this paper we ask how, and to what extent, assessment has a role in preparing students for learning in professional life. It is our belief that much current assessment is inadequate to the task of preparing learners for a lifetime of learning. However, there are some practices that have moved this agenda in the right direction. We shall look at some assessment initiatives that might contribute to preparation for lifelong learning and discuss implications of the agenda of lifelong assessment for the design of assessment practices.

From formative assessment to sustainable assessment

Although the formative function is often eclipsed on a day-to-day basis by the dominance of summative assessments, there has been a renewal of interest in formative assessment in recent years. Important reviews of research such as that by Black and Wiliam (1998) identified elements of good practice in formative assessment. They underpinned conventional advice that assessment to aid learning should be timely, focused on specifics, based on standards and it should encourage students to make their own judgements. However, a limitation of formative assessment in practice, if not in principle, is that, like summative assessment, it tends to focus on immediate outcomes—for example, the improvement of a specific assignment or achievement within a particular course. It is time-limited and focused on immediate learning concerns. This, of course, is a necessary part of assisting learning. However, Boud (2000) argued that this operated to ignore an important, but wider part of the assessment agenda: how to aid students become active players in managing their own learning, and necessarily, their own assessment beyond the end of the course. If done well, formative assessment was effective for the short term, but, other than initiatives such as encouragement of some forms of self and peer assessment, it did not engage with the challenges of learning for the longer term.

Indications of change

As suggested above, there has been considerable critique of both the adequacy of current formative assessment to help student learning (eg. Yorke 2003, Hounsell 2003) as well as the negative effects of summative assessment on learning (eg. Ecclestone 1999, Knight 2002). Most of this critique has focused on the effect on learning within courses, not on learning following graduation. Balancing this, however, has been the flourishing of new assessment practices designed to overcome the limitations of traditional unseen tests and examinations to address a much wider range of learning outcomes. A large array of self assessment (Boud 1995) and peer assessment (Falchikov 2005) practices has been developed. Forms of portfolio assessment are taking root in higher education and intriguing versions of these are being promoted (eg. patchwork assessment: Winter 2003). The term 'authentic assessment' is being taken up as a way of describing the linking of assessment tasks with normal professional tasks to ensure that there is greater correspondence between student work and that undertaken in workplaces (Newmann and Archbald, 1992).

However, if we look around to find broader institutional acceptance of these trends, examples are hard to find. A rare exception is Alverno College. Their philosophy, 'assessment as learning', represents an attempt to create, in the phrase they have adopted as an indicator for their approach, 'learning that lasts'. Mentkowski et al. (2000) assert that, for learning to be integrative and lasting, teaching, learning and assessment must be coherent not only across course modules, but across courses and programs. Alverno College emphasises explicit criteria, diagnostic feedback and reflective self assessment. A few aspects of their approach have been taken up in the American Association for Higher Education (AAHE) Assessment Forum Guide (2001) that contains principles of good practice for assessing students. Visible in these principles is the assertion that assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.

In an earlier paper (Boud 2000) discussed what was termed the 'basic resources needed for sustainable assessment' and identified a number of considerations prompted by research on formative assessment. There were:

- Confidence that new learning tasks can be mastered
- Exploration of criteria and standards that can apply to any given learning task
- Active engagement with learning tasks with a view to testing understanding and application of criteria and standards

- Development of devices for self-monitoring and judging progression towards goals
- Practice in discernment to identify critical aspects of problems and issues
- Access to learning peers and others with expertise to reflect on challenges and gain support for renewed efforts
- Use of feedback to influence new ways of engaging with the learning task
- Care in the use of language to avoid creating premature closure on ongoing learning

We continue the task of elaborating resources here by identifying further ideas to stimulate sustainable assessment design. We believe that through engagement with such ideas we can plan ways in which both existing assessment tasks might be modified to increase their potential for contributing to long term learning and new kinds of assessment activity generated to pursue this end. Table 1 lists some examples.

Table 1 is not intended to be authoritative, it provides a first set of suggestions about potentially fruitful ideas for a broader reassessment of assessment along the directions we are proposing. The six headings are groupings of convenience that aim to provide some coherence to a diverse set. There is overlap, and some ideas fit within more than one category. It should be noted that many, if not most, of these ideas connect not just to assessment but also with teaching and learning elements of courses. They should be considered as a conceptual extension to the more elaborated categories we have proposed as a framework for assessment for long-term learning in Boud and Falchikov (accepted for publication).

Implications for design

The challenge for those developing courses and course modules is to translate these ideas into tangible practices. What might be the some of the principles that would inform the design of assessment practices in the context of supporting long-term learning? We propose the following as a starting point for consideration:

1. Assessment is acknowledged as a major influence on student learning in all course design and development. Thus, all assessment activities need to be examined from the point of view of what they contribute to prompting desired student learning in general and learning beyond the point of assessment in particular. Some assessment practices actively inhibit some kinds of learning, often by excluding the pursuit of particular key skills and knowledge from assessment tasks, others focus student attention on the immediate test only. All should reflect the learning that is the intended outcome from the program.

2. Assessment should be judged first in terms of its consequences for student learning and second in terms of its effectiveness as a measure of achievement. An educational measurement that has negative consequences for learning can hardly be considered educational. The apparent dominance of reliability over validity in some practices should be reassessed. In other cases, the type of validity favoured should be reassessed.

Ideas to stimulate lifelong assessment development	Common term/concept	Example of source
Selecting & using evidence Widening and utilising types and sources of evidence of learning	Feedback	Hounsell 2003
Testing learning through resort to evidence	Generative ideas of learning	Jonasson et al 1999
Making decisions & judgements Recognising that judgement does not come fully formed and that staging is needed to develop expertise	Apprentices in judgement; developing evaluative expertise	Sadler 1989
Making judgements about own learning	Self-assessment	Boud 1995
Developing confidence in judgement and acknowledging compromise of judgements by surrounding circumstances.	Judgement and decision-making	Kahnemann et al. 1982
Managing risk	Risk; risk society	Beck 1992
Transparency Learners noticing key features of concepts being learned.	Discernment of variation	Bowden & Marton 1998
Identifying oneself as a learner and constructing one's activities to render learning visible	Identity as learners and construction of tasks as learning	Boud and Solomon 2003
Developing awareness of personal and professional processes	Reflexivity	Edwards et al 2002
Scaffolding & structure Recognising that judgement does not come fully formed and that staging is needed to develop expertise	Apprentices in judgement; developing evaluative expertise	Sadler 1989
Learners finding ways of building from what they do know to what they don't know	Scaffolding of knowledge	Neo-Vygotskians, (e.g. Bliss et al 1996)
Engaging with peers and others	Participatory and active approaches; peer assessment	Falchikov 2005
Context Locating knowledge in local practice	Situated learning and communities of practice	Wenger 1998
Integration Integrating learning over time and courses	Portfolios, Patchwork text	Winter 2003

Table 1. Some ideas to stimulate development of practice for long-term assessment

3. A key question for assessment activities is what do they contribute to students' understanding of the act of assessment in general and their ability to engage in self assessment in particular. Assessment needs to be demystified if students are to become confident enough to understand and use it in the world of practice. This is not simply about publishing criteria and weightings, but of students appreciating the connections between assessment activities and their learning and finding ways to make assessment work for them.

4. As students will inevitably be active players in making their own assessments of their learning after graduation, they need to be given opportunities within their courses to practice this skill in a number of different domains. Active student involvement in understanding assessment processes and contributing to them is essential.

5. Equipping students for long term learning and enabling them to effectively engage in their own assessments after graduation is a function of both the assessment practices to which they are exposed and the teaching and learning activities in which they take part. Assessment practices cannot therefore be examined independently of the learning tasks in which students participate prior to them. The often rigid divide between teaching and learning activities on the one hand and assessment activities on the other needs to be modified and a holistic view taken which looks at the overall impact of these on student long term learning.

Problems of uptake of assessment strategies for long-term learning

It is one thing to suggest that solutions are available, quite another for them to be adopted. While we are optimistic than explorations will continue to occur to develop new approaches, we are less sanguine about wider adoption. There are a number of reasons for this, but we wish to focus on two of them here. These are institutional systemic barriers and inhibitions and constraints within learners that arise as a function of their prior experience of being assessed.

Systemic barriers

The greatest systemic barrier is the dominance of summative assessment and associated concerns. External influences on educational institutions such as those from government agencies or professional bodies have caused both teachers and students to react defensively and pay more attention to summative than to formative assessment. The default position in discussions of assessment is a summative one as reflected in the emphasis in institutional assessment rules that go into great detail about procedures for marking and grading. Until relatively recently it was normal for such processes to assume that students have role other than to subject themselves to unilateral assessment by the institution. No one was prepared to deny the importance of assessment to promote learning, but there has been a lack of emphasis on formative assessment in institutional discourse and sometimes in daily practice within courses. The key skill or generic attribute agenda has partly attempted to address some of these concerns through its attention to learning-how-to-learn skills (eg. Hager and Holland, forthcoming), but it is common for these to be marginalised in disciplinary debate.

The key skills agenda may offer a fruitful point of engagement. Contributing to lifelong learning is often seen as an elusive goal in policy statements of universities. However, if it can be translated into the tangible form of equipping students with the skills they need to plan and make judgements about their own learning in university and throughout professional life, an entry point into a focus on assessment for long term learning can be made. It must be acknowledged that there is in practice far less external scrutiny of assessment in higher education than there is of assessment in almost any other sector, so a focus on what external bodies will say is often unfounded. Professional bodies are normally more

interested in the validity of assessment for professional practice—an important element of what has been discussed here—than they are with other features such as the impact on student present or future learning.

On a day-to-day basis the barrier that we have seen to have most influence is the unreflective baggage of lecturer's experience of norm-referenced assessment from their time as students. This has established an unwillingness to seriously engage with standards-based assessment of a kind compatible with the agenda we are pursuing here. It is often manifest in discussions that focus on 'what would happen if I gave all students High Distinctions?' This barrier is slowly beginning to crumble as the assessment policies of an increasing number of universities are moving or have moved in a direction that confronts the norm-based practices of the past. In the case of the University of Queensland and The University of Technology Sydney, for example, their policies against norm-referencing have been in place for over a decade. Students entering universities now have experienced a standards-based framework from their schooling (eg. the Higher School Certificate in NSW) and it may be that a generational change is needed before some of these ideas can take root.

Barriers within learners

Internal barriers have been little considered in higher education. However, it can be argued that these are perhaps the most pervasive barriers to having students see assessment as an important feature of their continuing learning. Past experiences of being assessed have the power to influence expectations and behaviour in the present. These experiences may be seen as the greatest obstacle to accepting assessment in the present or future. Anecdotal evidence from a number of our own students suggests that the experience of being humiliated or embarrassed by an assessor is less rare than one might hope for and that, even years after the event, individuals can continue to be distressed or angered by it. Such impressions can give rise to negative attitudes toward assessment. This does not make a good starting point to developing assessment skills for the future.

There is increasing evidence from new forms of testing that lack of success during earlier stages of education has an adverse impact on the motivation and confidence of learners. School pupils have been found to display anxiety and mistrust when faced with achievement testing (e.g. Assessment Reform Group, 2002). Undergraduates, too, find testing stressful, particularly when it takes the form of examinations (e.g. Martin, 1997). Being found wanting, or failing, brings its own baleful consequences. However, assessment need not have negative associations. The fact of being assessed is significant, and the same degree of distress does not seem to be associated with self assessment. This is not to say that self assessment is without its problems, but it is commonly found that reassurance, good preparation and practice reduce anxiety and build confidence in learners as assessors. There is, however, a qualitative difference between anxiety and humiliation. It may be necessary therefore to position the agenda of assessment for lifelong learning as far as possible from traditional forms of assessment and the connotations they have. We need to consider a new discourse that positions assessment not as an act of subjugation to others, but as one of asserting control over ones own learning. It is unfortunate that in English we have a single term—assessment—that denotes radically different things, which has been positioned, probably forever, as a sign of the dominant one.

Some directions for development

While some aspects of current assessment practice have features that encourage longer-term learning, it also has many more that undermine the ability of learners to prepare themselves for the learning that is a central feature of contemporary work. The design of university courses must take account of the linkage between assessment and lifelong learning and the variety of assessment roles, particularly that

of self assessment, in which graduates will be engaged. Sustainable assessment in which preparation for future learning and assessment is incorporated into assessment practices at all levels is a key element of such design (Boud 2000). Most important in this is the need for a view that considers teaching, learning and assessment as a whole and rejects treating assessment as separate from the processes of learning. We are encouraged by approaches such as those used by Mentkowski and her colleagues (e.g. Mentkowski et al., 2000; Rogers and Mentkowski, 2004) and Segers et al. (2003). They are based on the premise that learning must be integrative and lasting, and that the overall system of education must be coherent. However, as we have argued before, constructive alignment (Biggs 2003) of teaching, learning and assessment is important, but assessment must be aligned not only to immediate learning outcomes, but also with what is expected for long-term formal, non-formal or informal learning (Boud and Falchikov, accepted for publication).

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Learning Beyond Assessments. As teachers, you put a lot of effort into preparing students for exams and in grading them. But in the process, learning may inadvertently take a back seat. Does assessment spell the end of learning? Assessments are often equated with tests and exams. These are useful for ranking and placement purposes, when we need a practical way to make critical decisions. However, a second â€" and perhaps more critical â€" purpose of assessment is to support and enhance learning. â€œIn contrast to the regulatory approach, itâ€™s the educational purpose of assessment,â€ says Assistant Pr Supporting Student Success in Higher Education Beyond the Clinic. 2. FACT SHEET. The Problem The problem is that it wasn't enoughâ€¦or at least, the things that I experienced on campus were just not right. The stigma, the prejudice, the ...Â The AoL process is structured by the use of programme learning goals aligned through curricula and assessed directly, in order to enhance the achievement of learning goals by the student cohort. The guiding philosophy is to use student cohort performance data to inform system level change so that students achieve the overall programme-level learning goals, in contrast to the more normal assessment where the focus is on helping individual students perform better in individual courses. At the Higher Education Academy (HEA) we synthesised this work, and by building on Assessment Standards: a Manifesto for Change produced A Marked Improvement: Transforming Assessment in Higher Education.Â This requires a greater emphasis on assessment for learning rather than assessment of learningâ€. Kay Sambell and her colleagues (2013) have looked closely at assessment for learning, and have emphasised particular guiding principles for practitioners, which include designing authentic assessment; ensuring opportunities for informal and formal feedback; and using an effective mix of formative and summative assessments. Workshop. Reassessing innovative assessment - Erica Morris from HEA_AH.